

CLAIMS

We claim:

- 1 1. A method comprising:
2 at least one clearing of a plurality of first connections between a first node and a
3 second node of an ATM network from the first node; and
4 for each said clearing, sending a first message from the first node to the second
5 containing an identification of the first connections.

- 1 2. The method defined in claim 1 further including:
2 receiving the first message at the second node;
3 clearing the first connections from the second node in response to the received
4 first message; and
5 sending a single second message from the second node to the first node in
6 response to at least one of clearing the first connections from the second node and
7 receiving the first message identifying at least one of the
8 connections cleared in response to the received first message, and
9 the first message.

- 1 3. The method defined in claim 2 further including enabling an interpretation of the
2 received first message wherein the clearing from the second node depends upon the
3 enabling.

1 7. The method defined in claim 6 further including enabling an interpretation of the
2 received first message wherein the clearing from the first node depends upon the
3 enabling.

1 8. The method defined in claim 6 further including :
2 clearing the first connections from the second node; and wherein
3 the first message includes an identification of the first connections.

1 9. A method of clearing a plural number of connections between a first node and a
2 second node in an Asynchronous Transfer Mode network including:
3 sending at least one first message from the first node to the second node, each first
4 message including an identification of at least one of
5 each of a plural number of first connections to be cleared from the second
6 node by the first message, and
7 each of a plural number of first connections that is one of cleared from the
8 first node and to be cleared from the first node.

1 10. The method defined in claim 9 further including for each said first message,
2 clearing from the first node each said first connection.

1 11. The method defined in claim 9 wherein the first message is consistent with an
2 Asynchronous Transfer Mode formatted message.

5 the second node clearing each of the connections in the second node identified as
 6 to be cleared from the second node in the first message in response to receiving the first
 7 message.

1 16. The method defined in claim 10 further including the first node placing into a first
 2 database a record that includes an identification of each first connection cleared from the
 3 first node.

1 17. The method defined in claim 10 further including:
 2 the first node placing into a first database a first record that includes an
 3 identification of each first connection cleared from the first node, and into a second
 4 database a second record that includes an identification of each first connection cleared
 5 from the first node;
 6 the second node receiving each first message;
 7 the second node clearing each of the first connections identified in each received
 8 first message;
 9 the second node sending a second message to the first node in response to each
 10 received first message that includes an identification of each connection that is one of
 11 cleared and to be cleared from the second node;
 12 the first node in response to receiving each second message, deleting from the
 13 second database the identification of each connection identified in the second message.

- 1 34. An Asynchronous Transfer Mode (ATM) node that includes
2 a first circuit to receive and interpret a first message from a first node that
3 contains an identification of a plural number of first connections; and
4 a second circuit to clear the first connections from the ATM node.
- 1 35. The ATM node defined in claim 34 further including
2 a third circuit to send an ATM inter-nodal call control second message from the
3 ATM node to the first node that identifies a plural number of second connections, the
4 second connections characterized by at least one of the connections cleared by the ATM
5 node in response to the first message, and the first connections.
- 1 36. The ATM node defined in claim 34 further including a circuit to enable the first
2 circuit to interpret the first message in response to an enabling input.
- 1 37. An inter-nodal message for reception by an Asynchronous Transfer Mode (ATM)
2 node that includes a plurality of identified connections to clear from the node.
- 1 38. The message defined in claim 37 that further includes a transaction identification.
- 1 39. The message defined in claim 37 that further includes a field positioned according
2 to ATM protocol as a message type whose content is an identification of a type of the
3 message.

40. An inter-nodal first message for transmission by an Asynchronous Transfer Mode (ATM) first node to an ATM second node in response to a reception by the first node of an inter-nodal second message from the second node identifying a plural number of connections to clear from the first node that includes an identification of the plural number of connections.

41. The message defined in claim 40 that further includes a transaction identification.

42. The message defined in claim 40 wherein the second message includes a transaction identification and the first message includes the transaction identification.

43. The first message defined in claim 40 that further includes a field positioned according to ATM protocol as a message type whose content is an identification of a type of the first message.

44. A machine-readable medium that provides instructions, which when executed by at least one processor, cause said processor to perform operations comprising preparing at least one first message to be sent from a first node of an ATM network to a second node of an ATM network, each first message including an identification of a first connections to be cleared from the second node by the first message.

45. The operations defined in claim 44 further including for each said first message, clearing from the first node each said first connection.

1 46. The operations defined in claim 45 further including the first node placing into a
2 first database a record that includes an identification of each of the first connections
3 cleared from the first node.

1 47. The operations defined in claim 45 further including:
2 the first node placing into a first database a record that includes an identification
3 of each first connection cleared from the first node, and into a second database a record
4 that includes an identification of each first connection cleared from the first node;
5 the first node interpreting a third message received from the second node after the
6 first message is prepared that includes an identification of at least one connection;
7 the first node in response to interpreting each third message, deleting from the
8 second database the identification of each of the connections identified in the third
9 message.

1 48. The operations defined in claim 44 wherein the first message is consistent with an
2 Asynchronous Transfer Mode formatted message

1 49. The operations defined in claim 44 further including interpreting a second
2 message consistent with an Asynchronous Transfer Mode formatted message received
3 from an ATM network node wherein the second message includes an identification of
4 each of a plural number of connections to be cleared from the first node

generation of the first message and the transmission of the first message in response to an input if the first node was enabled.

54. The ATM node defined in claim 52 that further includes means for clearing each of the first connections.

55. The ATM node defined in claim 52 that further includes means for receiving a second message type containing an identification of at least one of each of a plural number of second connections in response to the first node receiving the first message type that is one of cleared from a second node and to be cleared from the second node.

56. The ATM node defined in claim 55 that further includes a database of the first connections that are cleared from the ATM node, and a data base of the first connections that are cleared from the ATM node from which are deleted the second connections in the received second message type.

57. The ATM node defined in claim 52 that further includes

means for receiving a first message type from a second node, the third message type containing an identification of a plural number of second connections;

means for interpreting the received first message type; and

means for clearing the second connections from the ATM node in response to the interpreting.

